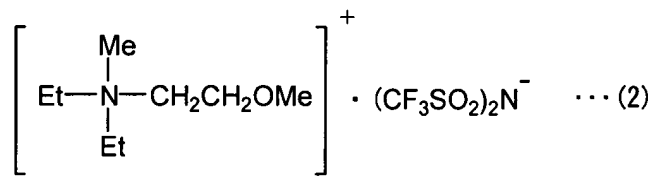


### AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions of claims in the application.

1. (Currently Amended) A process for photolyzing organic matter, characterized by photolytically degrading organic matter within a reaction system that includes a photocatalyst and a hydrophobic ionic liquid,

wherein the hydrophobic ionic liquid is a quaternary ammonium-type ionic liquid having formula (2) below



wherein "Me" stands for methyl and "Et" stands for ethyl.

2-4. (Canceled)

5. (Original) The process for photolyzing organic matter of any one of claims 1 to 4 which is characterized in that the photocatalyst is titanium dioxide.

6. (Currently Amended) A wastewater treatment process which is characterized by using the process for photolyzing organic matter of ~~any one of claims 1 to 4~~ claim 1.

7. (Original) The wastewater treatment process of claim 6 which is characterized by comprising the steps of, in order:

extracting organic matter by mixing together a hydrophobic ionic liquid and organic matter-containing wastewater so as to move the organic matter from the wastewater into the hydrophobic ionic liquid;

separating the organic matter-containing hydrophobic ionic liquid and the wastewater;  
and

adding a photocatalyst to the organic matter-containing hydrophobic ionic liquid and carrying out light exposure so as to photolytically degrade the organic matter.

8. (Original) The wastewater treatment process of claim 6 which is characterized by comprising the steps of, in order:

subjecting a mixture of a hydrophobic ionic liquid, a photocatalyst and organic matter-containing wastewater to light exposure under agitation so as to photolytically degrade the organic matter; and

separating the wastewater and the hydrophobic ionic liquid.